

HAZARDOUS MATERIALS DATA SHEET
(PLEASE COMPLETE APPLICABLE SECTIONS)

FEB 19 1982

1. PRODUCT NAME, NUMBER, SYNONYM: HM-3 Fluorescent Penetrant [DPM 550-3 - DMS 1908 Grd 3]
2. MANUFACTURER'S NAME: Sherwin Incorporated
3. MANUFACTURER'S ADDRESS: 5007 East Washington Blvd., Los Angeles, Ca 90022
4. PROCEDURE IN CASE OF BREAKAGE OR LEAKAGE: HM-3 is water-soluble. Flush area with water.
5. TRANSPORTATION AND STORAGE REQUIREMENTS: No special requirements. Ship and store in standard carbon steel drums.
6. FIRST AID TREATMENT:
- A. SKIN CONTACT: Soap and water followed by hand creams.
- B. EYE CONTACT: Immediately flush with plenty of water for fifteen minutes. Medical attention may be advisable.
- C. INHALATION: Remove victim to fresh air; call a physician. (This hazard is highly unlikely as relatively low volatility is not conducive to high vapor concentrations.)
- D. ANTIDOTE IN CASE OF SWALLOWING: Do not induce vomiting. Call a physician.
7. PHYSIOLOGICAL PROPERTIES:
- A. ACUTE ORAL TOXICITY: Unknown.
- B. LOCAL EFFECTS UPON EYES: Irritation.
- C. LOCAL EFFECTS UPON SKIN: Defatting.
- D. ESTIMATE OF ACUTE HAZARD BY INHALATION (VOLATILE MATERIALS): Not an acute hazard.

E. WARNING PROPERTIES (ODOR, IRRITATION TO EYES, NOSE OR THROAT): Hydrocarbon odor.

F. ESTIMATED THRESHOLD LIMIT VALUE (IF NOT ON CURRENT LIST BY AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS): Estimated 500 ppm

8. CHEMICAL AND PHYSICAL PROPERTIES:

A. SPECIFIC GRAVITY (WATER = 1) 0.8923 B. VAPOR DENSITY (AIR = 1) Apprx 3.5

C. VAPOR PRESSURE mm Hg AT 25°C. less than 1 mm absolute D. pH not applicable
pressure

E. CORROSIVE ACTION ON COMMON MATERIALS SUCH AS: ALUMINUM, MAGNESIUM, PLEXIGLASS, RUBBER, LACQUERS, ENAMELS, FABRICS: Noncorrosive to aluminum, magnesium, other metals and ceramics. But crazes plexiglass, softens paints and stains fabrics.

F. DOES THE MATERIAL DECOMPOSE WHEN EXPOSED TO AIR? WATER ? HEAT? STRONG OXIDIZERS? No.

G. FOR MIXTURES GIVE THE PERCENTAGE COMPOSITION OF INGREDIENTS:

<u>COMPOUND</u>	<u>PERCENT</u>
1. <u>Petroleum Solvent (Rule 66 Exempt) Composition</u> by volume 3.6 aromatics. 0.4 olefins, 96.0 saturates.	<u>50 to 60%</u>
2. <u>Linear Alcohol Ethoxylates</u>	<u>10 to 20%</u>
3. <u>Alkylphenol Ethoxylates</u>	<u>5 to 15%</u>
4. <u>Ethylene Glycol Monobutyl Ether</u>	<u>3 to 7%</u>
5. <u>Fatty Acid Esters</u>	<u>8 to 20%</u>
6. <u>Fluorescent Dyestuffs</u>	<u>0.5 to 5%</u>

NOTE:

GENERALIZATIONS SUCH AS PETROLEUM HYDROCARBONS, ALCOHOLS, KETONES, CHLORINATED HYDROCARBONS, ETC. ARE NOT ADEQUATE FOR TOXICOLOGICAL EVALUATION. PROPER CHEMICAL NAMES MUST BE KNOWN.

H. DOES THE MATERIAL GENERATE HEAT THROUGH POLYMERIZATION OR CONDENSATION? No.

9. PRECAUTIONS FOR NORMAL CONDITIONS OF USE: Provide good ventilation. Keep away from open flame.
10. RECOMMENDED PROTECTIVE EQUIPMENT: Rubber or neophrene gloves.
11. A. FLASH POINT °F: CLOSED CUP _____; OPEN CUP 170°F +; IF F.P. CHANGES DURING EVAPORATION GIVE DATA: _____
- B. EXPLOSIVE LIMITS (% VOL. AIR): LOWER 1; UPPER 7
- C. SUSCEPTIBILITY TO SPONTANEOUS HEATINGS: YES _____; NO X
- D. FIRE POINT °F Estimated 210°F.; AUTO IGNITION TEMPERATURE °F Estimated above 500°F.
- E. VAPOR DENSITY (air - 1) 3.5 approximately
- F. WHAT PRODUCTS MIGHT BE FORMED IN THE EVENT OF FIRE OR ABNORMAL TEMPERATURES? Carbon dioxide and water.
- G. SUITABLE EXTINGUISHING AGENTS: Carbon dioxide, dry chemical or foam.
12. INFORMATION FURNISHED BY: A. G. Sherwin
- TITLE: Manager
- COMPANY: Sherwin Incorporated
- ADDRESS: 5007 East Washington Blvd., Los Angeles, Ca 90022
- DATE: August 19, 1968

NOTE: INFORMATION IN REGARD TO A MATERIAL'S COMPOSITION WILL BE TREATED AS CONFIDENTIAL AND USED FOR THE PURPOSE OF PROTECTING THE HEALTH AND SAFETY OF MCDONNELL DOUGLAS CORP. EMPLOYEES AND THE SAFEGUARDING OF ITS PROPERTY. IT WILL ALSO BE USED FOR THE PURPOSE OF COMPLYING WITH LOCAL, STATE AND FEDERAL ORDINANCES, LAWS AND CODES, AND REQUIREMENTS OF GOVERNMENTAL AGENCIES.

THE COMPLETED FORM SHOULD BE RETURNED TO PURCHASING, DOUGLAS AIRCRAFT DIVISION, LONG BEACH, CALIF. 90801.